

NOTICE

DEC 2 6 2001

Patton Boggs LLP

DECEMBER 19, 2001

PATTON BOGGS LLP JAMES M. GRAZIANO P.O. BOX 270930 LOUISVILLE, CO 80027

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RECORDATION DATE: 10/03/2001

REEL/FRAME: 012232/0457

NUMBER OF PAGES: 11

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

GENERAL DATACOMM, INC.

DOC DATE: 08/08/2001

ASSIGNEE:

AHEAD COMMUNICATIONS SYSTEMS, INC.

MIDDLEBURY, CONNECTICUT

SERIAL NUMBER: 09029585

FILING DATE: 02/27/1998

ISSUE DATE:

SERIAL NUMBER: 09172545

FILING DATE: 10/14/1998

PATENT NUMBER:

ISSUE DATE:

SERIAL NUMBER: 60093826

FILING DATE: 07/22/1998

ISSUE DATE:

PATENT NUMBER:

SERIAL NUMBER: 09029295

SERIAL NUMBER: 60093681

FILING DATE: 03/05/1998

ISSUE DATE:

PATENT NUMBER:

PATENT NUMBER:

FILING DATE: 07/22/1998

PATENT NUMBER:

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012232/0457 PAGE 2

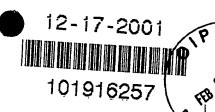
| SERIAL NUMBER: 09744323 PATENT NUMBER: | FILING DATE: 05/29/2001 ISSUE DATE: |
|---|---|
| SERIAL NUMBER: 09077219 PATENT NUMBER: 6327246 | FILING DATE: 05/19/1998 ISSUE DATE: 12/04/2001 |
| SERIAL NUMBER: 09744324 PATENT NUMBER: | ISSUE DATE: |
| SERIAL NUMBER: 09289463 PATENT NUMBER: | |
| SERIAL NUMBER: 09289464 PATENT NUMBER: | ISSOL DATE. |
| PATENT NUMBER: | FILING DATE: 05/21/2001 ISSUE DATE: |
| | FILING DATE: 08/10/1999 ISSUE DATE: 08/28/2001 |
| • | FILING DATE: 08/10/2000 ISSUE DATE: |
| | FILING DATE: 09/29/1999 ISSUE DATE: |
| SERIAL NUMBER: 08147939 PATENT NUMBER: 5436893 | FILING DATE: 11/05/1993 ISSUE DATE: 07/25/1995 |
| SERIAL NUMBER: 08622897 PATENT NUMBER: 5949782 | FILING DATE: 03/29/1996 ISSUE DATE: 09/07/1999 |
| SERIAL NUMBER: 08973441 PATENT NUMBER: 6122253 | FILING DATE: 12/04/1997 ISSUE DATE: 09/19/2000 |
| SERIAL NUMBER: 08532888 PATENT NUMBER: 5615211 | FILING DATE: 09/22/1995 ISSUE DATE: 03/25/1997 |
| SERIAL NUMBER: 08913815 PATENT NUMBER: 6044060 | FILING DATE: 09/15/1997 ISSUE DATE: 03/28/2000 |
| SERIAL NUMBER: 08973442 PATENT NUMBER: 6115358 | FILING DATE: 12/04/1997 ISSUE DATE: 09/05/2000 |
| SERIAL NUMBER: 08526846 PATENT NUMBER: 5712853 | FILING DATE: 09/11/1995 ISSUE DATE: 01/27/1998 |
| SERIAL NUMBER: 08644308 PATENT NUMBER: 5841773 | FILING DATE: 05/10/1996 ISSUE DATE: 11/24/1998 |
| SERIAL NUMBER: 08942021 PATENT NUMBER: 6028840 | FILING DATE: 10/01/1997 ISSUE DATE: 02/22/2000 |

012232/0457 PAGE 3

| | NUMBER: | | FILING DATE: 01/29/1998 ISSUE DATE: 03/21/2000 |
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| | NUMBER: | 08853654 6141322 | FILING DATE: 05/09/1997 ISSUE DATE: 10/31/2000 |
| | NUMBER: NUMBER: | 08406300 5796956 | FILING DATE: 03/17/1995 ISSUE DATE: 08/18/1998 |
| | NUMBER: | 08675955 5864555 | FILING DATE: 07/05/1996 ISSUE DATE: 01/26/1999 |
| | NUMBER: | 09015302 6088365 | FILING DATE: 01/29/1998 ISSUE DATE: 07/11/2000 |
| | | 08930973 6067286 | FILING DATE: 10/07/1997 ISSUE DATE: 05/23/2000 |
| _ | NUMBER: | 08573244 5659540 | FILING DATE: 12/15/1995 ISSUE DATE: 08/19/1997 |
| | NUMBER: | 09015301 6049544 | FILING DATE: 01/29/1998 ISSUE DATE: 04/11/2000 |
| | NUMBER: | 08317336 5461609 | FILING DATE: 10/04/1994 ISSUE DATE: 10/24/1995 |
| | NUMBER: | 08624812 5781529 | FILING DATE: 03/27/1996 ISSUE DATE: 07/14/1998 |

JACQUELINE MOORE, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

FORM PTO 1619A C. Expres 06/30/90 OMB 0651-027



U.S. Department of Commerce Patent and Trademark Office PATENT

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RECORDATION FORM COVER STEEDS

| TO: The Commissioner of Patents and Tradema | ks: Please record the attached original document(s) or copy(ies). |
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| Submission Type | Conveyance Type |
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| Resubmission (Non-Recordation) Document ID# | Conveyance Type X Assignment Security Agreement Change of Name Change of Name Other U.S. Government (For Use ONLY by U.S. Government Agencies) Departmental File Secret File |
| Correction of PTO Error Reel # Frame # Corrective Document | Merger U.S. Government (For Use ONLY by U.S. Government Agencies) |
| Reel # Frame # | Departmental File Secret File |
| Conveying Party(ies) | |
| Name (line 1) General DataComm, Inc. | Month Day Year |
| Name (line 2) | Execution Date |
| Name (line 1) | Month Day Year |
| Name (line 2) | 09289464 |
| Receiving Party | Mark if additional names of receiving parties attached |
| Name (line 1) Ahead Communications Sys | is an assignment and the |
| Name (line 2) | receiving party is not domiciled in the United States, an appointment |
| Address (line 1) | of a domestic representative is attached. (Designation must be a |
| Address (line 2) | separate document from Assignment.) |
| Address (Ilne 3) Middlebury | CT State/Country Zip Code |
| Domestic Representative Name and A | The for the met reconving fairly only. |
| Name John Cumberton | |
| Address (line 1) Ahead Communications Sys | stems. Inc. |
| | |
| Address (line 2) | |
| Address (line 3) | |
| Address (line 4) | <u> </u> |
| 5/200 0908551 00000095 501848 09889464) | FOR OFFICE USE ONLY |
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| FORM PTO- Expite 06/50/90 OMB 0651-0027 | 1619B | F | age 2 | U.S. Department of Patent and Trade PATEN | mark Office |
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| orresponde | nt Name and Addres | S Area Code | and Telephone Nu | mber (303) 379-1113 | |
| Name [j | ames M. Graziano | | | | |
| Address (line 1) | atton Boggs LLP | | | | |
| Address (line 2) | O. Box 270930 | | | | |
| Address (line 1) | | | | | |
| Address (line 4) | Louisville, CO 80027 | | | | |
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| 09029585 | | 09077219 | 5436893 | 5615211 5712 | 853 |
| 09172545 | 60093681 | 09744324 | 5949782 | 6044060 5841 | 773 |
| 60093826 | | 09289463 | 6122253 | 6115358 6028 | |
| if this document is algned by the firs | being filed together with a <u>new</u> t named executing inventor. | L Patent Application, | enter the date the patent | application was Month Di | y Year |
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| | r PCT application number | | PCT | PCT | |
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| Number of P | roperties Enter t | he total number | of properties involve | ed. # 33 | |
| Fee Amount | Fee Am | ount for Properti | es Listed (37 CFR | 3.41): \$ 1.320.00 | |
| | of Payment: Account | Enclosed | Deposit Account | X | |
| (Enter for | payment by deposit account or | rif additional foes car Deposit Acco | | nt.) #50-1848 | |
| | | Authorization | n to charge additional | fees: Yes X No | |
| Statement a | nd Signature | | | | |
| attach | best of my knowledge a ed copy is a true copy of ted herein. | nd belief, the foi f the original doc | regoing information cument. Charges to | is true and correct and any deposit account are author | rized, as |
| John Cumber | tón | 7 | Char | 9/26 | 07 |
| | of Person Signing | U | Signature | Date | 1 |
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SORDATION FORM COVER SHEET U.S. Department of Commerce FORM PTO-16199 Expires 06/30/99 CONTINUATION Patent and Trademark Office **PATENT** OMB 0651-0027 PATENTS ONLY Conveying Party(169) Mark if additional names of conveying parties attached Enter additional Conveying Parties of **Execution Date** Month Day Year Name (line 1) Name (line 2) **Execution Date** Month Day Year Name (line 1) Name (line 2) **Execution Date** Month Day Year Name (line 1) Name (line 2) Receiving Party(les) Mark if additional names of receiving parties attached Enter additional Receiving Party(ies) If document to be recorded Name (line 1) is an assignment and the receiving party is not domiciled in the United Name (line 2) States, an appointment of a domestic representative is attached. (Designation Address (line 1) must be a separate document from Assignment) Address (line 2) Address (line 3) State/Country Zip Code Name (line 1) If document to be recorded is an assignment and the receiving party is not Name (line 2) domiciled in the United States, an appointment of a domestic representative is Address (line 1) attached. (Designation must be a separate document from Assignment.) Address (line 2) Address (line 3) Application Number(s) or Patent Number(s) Mark if additional numbers attached Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property). Patent Application Number(s) Patent Number(s) 09408449 6041064 6088365 6049544 09289464 09371196 6141322 6067286 5461609 09806783 09636277 5659540 5781529 5796956 5864555

PATENT/INVENTION ASSIGNMENT AND TRANSFER

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sums recited in the Asset Purchase Agreement between ASSIGNOR and ASSIGNEE of even date herewith, the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR:

General DataComm, Inc. Middlebury, CT A Delaware corporation RECEIVED
FEB 1 2 2002
Technology Center 2600

hereby irrevocably sells, conveys, assigns and transfers to

ASSIGNEE:

Ahead Communications Systems, Inc. Middlebury, CT A Delaware corporation

and its successors, assigns and legal representatives, the entire rights, title and interests, including all rights, appurtenant thereto, in and to certain Letters Patent and applications therefore and any continuations, continuations-in-part, divisionals, renewals, substitutions, reissues, re-examinations or extensions, thereof (the "Patents") identified in Exhibit 1 attached hereto, for the United States and its territorial possessions and for all countries foreign to the United States, including any and all associated rights, title and interests in and to all invention disclosures, whether or not formally disclosed, in the United States or in any country foreign to the United States, to be obtained for any and all inventions, concepts and ideas ("Inventions") constituting Acquired Assets as defined in the above referenced Asset Purchase Agreement, including all related rights of priority arising from the Patents and/or the Inventions under all treaties, conventions or agreements, and/or all the rights and privileges under any and all forms of United States or foreign protection outside of the United States, and which is commensurate with the full term of the granted patent.

This assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country for proof of right of Assignee to obtain and/or apply for a Patent or other form of protection for the invention and to claim the aforementioned benefit of the right of priority.

ASSIGNOR agrees that ASSIGNOR will execute, without further consideration, such further instruments and documents as are or may be necessary or convenient to effectuate and carry out this assignment and transfer.

ASSIGNOR agrees to the terms recited herein as evidenced by the signature of ASSIGNOR'S duly authorized representative.

| Patent/Invention Assignment and Transfer Page 2 | |
|--|--|
| Effective Date: August 13, 2001 | General DataComm, Inc. |
| United States of America) | |
| ^ | |
| State of (mneetrut) | · |
| County of New Hower) | |
| On this day of Aug appeared on behalf of the above entity in findentified above, and who executed the foregothat CP Johnson executed the same of | ust, 2001, the above named individual personally ront of me and is known to be the person who is bing assignment instrument and acknowledged to me own free will for the purpose therein expressed. James A. Clier Parker |
| | LAURIE A. ELIAS-PARKER NOTARY PUBLIC |
| | My Commission Expires May 31, 2008 |

GDC ATM Patents, Patent Applications, and Patents in Process

| | | | ••• | | | 1 |
|-------------------|--|--------------|-------------|---------------------|------------|-------------------|
| Attorney File# | Title | | US File | US File Serial # | US Patent# | US Patent Date |
| GDC-111 | Synchronizing ATM AAL2 Minicell GDC-111 Generation to Muliple Voice Processing Functions | M Hple | ि = च्याच्य | · | | |
| GDC-120 | SS7 Signalling Gateway GDC-120 Server for Voice Trunking over ATM | teway // | | | | |
| GDC-091 | GDC-091 High Speed Switching | oling its | | | | |
| GDC-097 | Planned Capacity GDC-097 Based Rouling for Wide Area ATM Systems | Wide S | | | | |
| GDC-098 | Load Balancing in ATM Networks | АТМ | | | | |
| 600-088 | Priority in ATM Networks | | | | | |
| GDC-126 | GDC-126 Volce Transmission | n ocols | | | | |
| GDC-086 | ATM Network Switch GDC-086 Having Enhanced Call Setup Capability | 중합 | 02/27/98 | 09/029,585 | | |
| GDC-087 | GDC-087 Priority Buffers | ر ر | 03/05/98 | 09/029,295 | | |
| | | | <i>-</i> : | | | |

| Attorney File# | TRUG | | US File Date | US File Serial | US Patent# | uS Patent Date |
|-------------------|--|--------------------------|---|-------------------------|------------|-------------------|
| GDC-088 | Controlled Available Bit GDC-088 Rate Service in an ATM Switch | e Bit ATM | 05/19/98 | 09/077,219 | | · |
| GDC-118 | GDC-118 Interface |)PIA | 10/14/98 | 09/172,545 | | |
| GDC-128 | A Dynamic Buffer GDC-128Management for ATM Switches | TM | provisional0 7/22/98 final 1/19/01 | 60/093681 | | |
| GDC-129 | An Explicit Rate ABR Algorithm for New Generation of ATM Switches | 3R 1 | provisional0 7/22/98 final 1/19/99 | 60/093826 09/744,323 | | |
| GDC-130 | Method for Mapping GDC-130 Narrowban DSO droults Into AAL type 2 SVC's | g Ircuits 'C's | 04/09/99 | 09/289,463 | | |
| GDC-131 | Method & Apparatus for Generation of ATM AAL2 type Broadband Setup Message from Narrowband Setup | us for f and xm | 04/09/99 | 09/289,464 | | |
| GDC-132 | Transporting Narrowband (volce) Traffic over a Broadband (ATM) Network | <u> </u> | 08/10/99 | 09/371,196 | | · |
| GDC-134 | GDC-134 Dafa Switch | | 9/29/99 | 09/408,449 | | |
| GDC-135 | GDC-135 Bundle Shaping or | | 09/23/89 | PCT/US99/ 22643 | | |
| | | | | | | |

| Attomey File# | Tille | US File Date | US File Serial | US Patent # | US Patent Date |
|------------------|--|-----------------|----------------|-------------|-------------------|
| GDC-137 | Traffic Shaping Machanism for Packetized Data in a Dioital Network | 08/10/00 | 09/636,277 | | |
| GDC-071 | Allow Access to ILMI Address Registration GDC-071MIB from Multiple Links and from SNMP Manager | | · 2" | | |
| GDC-073 | Route Encapsulation GDC-073 and Recovery of Node Dependent Paths | ·, | | | |
| GDC-085 | Service Specific Convergence Sublayer GDC-085for Narrowband Packetization & Transport | <u> </u> | | | |
| GDC-089 | | | | | |
| GDC-117 | GDC-117 Multicast Connection Label Allocator | | | | |
| GDC-056 | ATM Cell Switch GDC-056Suitable for Multicast Switching | 11/05/93 | 08/147,939 | 5,436,893 | 07/25/95 |
| GDC-057 | GDC-057 Data Network Switch | 10/04/94 | 08/317,336 | 5,461,609 | 10/24/95 |
| GDC-059 | GDC-059ATM Cell Switch | 03/17/95 | 08/406,300 | 5,796,956 | 08/18/98 |
| | | - | | | |

Page 3 of 6

| Attorney File# | TRie | US File Date | US File Serial | US Patent# | US Patent Date |
|-------------------|--|-----------------|----------------|------------|-------------------|
| GDC-063 | Packet Mode Transfer GDC-063for Microcell TDM Backolane | 09/22/95 | 08/532,888 | 5,615,211 | 03/25/97 |
| GDC-064 | Use of OAM Cells across an ATM Frame UNI | 09/11/95 | 08/526,846 | 5,712,853 | 01/27/98 |
| GDC-070 | User Programmable OAM Loopbacks and GDC-070Physical Loopback Delection in an ATM Network | 12/15/95 | 08/573,244 | 5,659,540 | 08/19/97 |
| GDC-072 | GDC-072 Routing ATM Switched | 03/27/96 | 08/624,812 | 5,781,529 | 07/14/98 |
| GDC-075 | 'Proxy" Connection End-Points for ATM OAM Functions | 07/05/96 | 08/675,955 | 5,864,555 | 01/26/99 |
| GDC-077 | GDC-077 Correlation Tag for Billing in ATM | 03/29/96 | 08/622,897 | 5,949,782 | 09/07/89 |
| GDC-079 | A Traffic Shaping ATM Network Switch | 09/15/97 | 08/913,815 | 6,044,060 | 03/28/00 |
| GDC-080 | ATM Network Switch with Congestion Level Signaling for Controlling Cell Buffers | 05/10/98 | 08/644,308 | 5,841,773 | 11/24/98 |
| GDC-082 | GDC-082 Congestion Control | 12/04/97 | 08/973,441 | 6,122,253 | 09/13/00 |
| GDC-083 | Controlling the Flow of GDC-083ATM Cells in an ATM Network | 12/04/97 | 08/973,442 | 6,115,358 | 08/02/00 |

| Attorney File# | Title | US File Date | US File Serial | US Patent # | US Patent Date | 世 |
|-------------------|--|-----------------|----------------|-------------|-------------------|---|
| GDC-084C | Method & Apparatus for Connection Admission Control of Variable BitRate Traffic in an ATM Switch | 10/01/97 | 08/942,021 | 6,028,840 | 02/22/00 | 0 |
| GDC-108D | Dynamic Data GDC-108 Distribution to/from DSP Array (in VSM) | 01/29/98 | 09/015,303 | 6,041,064 | 03/21/00 | |
| GDC-109 A | ATM AAL1 & AAL2 Adaptations Using Per Bearer Channel Selectable Data Patch | 01/29/98 | 09/015,302 | 6,088,365 | 02/11/00 | |
| GDC-110 H | Fixed-Rate Serial Data Highway for Conveying Variable Rate Data for ATM AAL2 Processing | 01/29/98 | 09/015,301 | 6,049,544 | 04/11/00 | 0 |
| GDC-113P | Precedence & GDC-113Preemption in ATM Call Admission Control | 05/09/97 | 08/853,654 | 6,141,322 | 10/31/00 | 0 |
| GDC-139 | Coordinating Multiple Processors (tent) | | • | | | |
| GDC-140b | Efficient Task Sharing GDC-140 between processors (tent) | · :: | · | | | |
| S GDC-141E | Signalling of an Internal Event in an Array of Processors (tent) | | | | | |
| CDC-142E | Large Scale Multi- GDC-142Environment DSP Array (tent) | ÷. | | | | |

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|--------------------|--|----------|-------------|---|--------------------|------------|-------------------|
| Attorney File # | Title | UK Date | UK Seriai # | UK Seriai # US File Date US File Date # | US File Serial | US Patent# | US Patent Date |
| | ATM Network Switch (Semi-permanent Virtual Paths & Circuits) | 10/20/99 | 2 306 849 | | | | |
| | Virtual Channel Management | 05/11/98 | 2 337 404 | | | | |
| GDC-136 | GDC-136 Information Processing | 10/02/98 | 2 344 262 | 03/30/01 | 09/806,783 | | |
| GDC-078 | GDC-078 With Fault Tolerance | 03/22/00 | 2 299 914 | 10/07/97 | 08/930,973 | 6,067,286 | 05/23/00 |
| GDC-133 | GDC-133 Communication | 02/10/98 | 2 344 029 | 68/82/60 | PCT/US99/22 653 | | |
| | Data Switch Performance Monitoring | 10/02/98 | 2 342 527 | · | | | |
| _ | | | | | | | |